Emissions Inventory EXAMPLE: Natural Gas Boilers and Heating Equipment

General Process Form	2000]	Permit number(s)
1- Process ID 1				
2- Process Type/Description:	3 boilers & 1	water heater, eacl	h rated less than 10,0	000,000 Btu/hr
3- Stack ID(s) (only if required on Sta	ck Form)			
4- Process TIER Code: 02030	1	FUEL COMBUSTION	NATURAL GAS	
5- SCC Code 10200603	(8 digit number) INDU	STRIAL NATURAL GAS	S COMBUSTION < 10 MMB	TU/HR
6- Seasonal Throughput Percent:	Dec-Feb 25 %	Mar-May <u>25</u> %	Jun-Aug <u>25</u> % Sep-No	ov <u>25</u> %
7- Normal Operating Schedule:	Hours/Day 18	Days/Week6	Hours/Year 5616	
8- Typical Hours of Operation (milita	ery time) Start 0600	End _	2359	military time for 6:00 a.m. to midnight
9- Emissions based on: (name of mat	erial or other parameter e.g.	"rock", "diesel", "vehicle n	niles traveled") <u>natural</u>	gas
10- ⊠ Used (input) or	☐ Produced (output)			
11- Annual Amount: (a number)	25,000			

NOTE: Place an X in any gray cell to mark data requested to be held confidential. See Instructions for requirements for information to be deemed confidential.

	Emission Factor (EF) Information				Control Device Information						
14	15	16	17	18	19	20	21	22	23	24	
	Emission		Controlled	Calculation	Capture%	Primary	Secondary	Control	Efficiency		
Pollutant	Factor (EF)	EF Units	EF?	Method	Efficiency	Control	Control	Device(s) %	Reference	Estimated Act	ual
	(number)	(lbs per)	Yes or No	Code*		Device ID	Device ID	Efficiency	Code**	Emissions	
CO	84	lb/MMCF	No	5						200	lb
NOx	100	lb/MMCF	No	5						238	lb
PM10	7.6	lb/MMCF	No	5						18	lb
SOx	0.6	lb/MMCF	No	5						1	lb
VOC	5.5	lb/MMCF	No	5						13	lb

NOTE: This is the most common natural gas equipment type. Code on line 4 and EFs in column 15 are suitable for any size natural gas heating equipment (but NOT Engines). Emissions are calculated as follows:

Annual amount (line 11) ´ unit conversion factor (line 13) x EF (col. 15) = col. 24, Estimated Pollutant Emissions

Example for CO: 25,000 therms ´ 0.0000952 MMCF/therm = 2.38 MMCF ´ 84 lb/MMCF = 200 lb. CO emissions

*Calculation Method Codes

1 = Continuous Emissions Monitoring Measurements

12- Unit of Measure: (for example: tons, gallons, million cu ft, acres, units produced, etc.)

13- Unit Conversion Factor: (if needed to convert Unit of Measure to correlate with emission factor units)

- 2 = Best Guess/ Engineering Judgment
- **3** = Material Balance
- 4 = Source Test Measurements (Stack Test)
- **5** = AP-42/ FIRE Method or Emission Factor
- **6** = State or Local Agency Emission Factor
- 7 = Manufacturer Specifications

**Control Efficiency Reference Codes

- 1 = Tested efficiency / EPA reference method
- 2 = Tested efficiency / other source test method
- **3** = Design value from manufacturer
- **4** = Best guess / engineering estimate
- **5** = Calculated based on material balance
- **6** = Estimated, based on a published value